

Missouri Department of Natural Resources



PUBLIC NOTICE

DRAFT MISSOURI STATE OPERATING PERMIT

DATE: September 22, 2006

In accordance with the state Clean Water Law, Chapter 644, RSMo, Clean Water Commission regulation 10 CSR 20-6.010, and the federal Clean Water Act, the applicants listed herein have applied for authorization to either discharge to waters of the state or to operate a no-discharge wastewater treatment facility. The proposed permits for these operations are consistent with applicable water quality standards, effluent standards and/or treatment requirements or suitable timetables to meet these requirements (see 10 CSR 20-7.015 and 7.031). All permits will be issued for a period of five years, unless noted otherwise in the Public Notice for that discharge.

On the basis of preliminary staff review and the application of applicable standards and regulations, the Missouri Department of Natural Resources (MDNR), as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions. The proposed determinations are tentative pending public comment.

Persons wishing to comment on the proposed permit conditions are invited to submit them in writing to the Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, Missouri 65102, ATTN: NPDES Permits and Engineering Section / Permit Comments. **Please include the permit number in all comment letters.**

Comments should be confined to the issues relating to the proposed action and permit(s) and the effect on water quality. The MDNR may not consider as relevant comments or objections to a permit based on issues outside the authority of the Clean Water Commission, (see Curd v. Mo. Clean Water Commission, 586 S.W.2d 58 Mo. App. 1979).

All comments must be postmarked by October 23, 2006 or received in our office by 5:00 p.m. on October 26, 2006. The requirement of a signed document makes it impossible to accept email comments for consideration at this time. Comments will be considered in the formulation of all final determinations regarding the applications. If response to this notice indicates significant public interest, a public meeting or hearing may be held after due notice for the purpose of receiving public comment on the proposed permit or determination. Public hearings and/or issuance of the permit will be conducted or processed according to 10 CSR 20-6.020.

Copies of all draft permits and other information including copies of applicable regulations are available for inspection and copying at DNR's website, <http://www.dnr.mo.gov/env/wpp/index.html>, or at the Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, Missouri 65102, between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday.

Public Notice Date: September 22, 2006

Permit Number: MO-0132896

Northeast Regional Office

FACILITY NAME AND ADDRESS

Fish Creek Landfarm #1
Rt. #1, Box 145, Gilliam, MO 65330

NAME AND ADDRESS OF OWNER

Wayne Brown Enterprises, Inc.
Rt. #1, Box 145, Gilliam, MO 65330

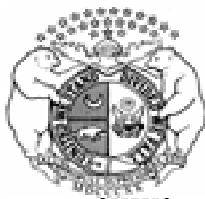
RECEIVING STREAM & LEGAL DESCRIPTION

Receiving Stream: Unnamed Tributary to Fish Creek (U)
Legal Description: SW ¼, SW ¼, Sec. 3, T51N, R19W,
Saline County
Latitude/Longitude: +3913208/-09258407

TYPE OF DISCHARGE

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No.

MO-0132896

Owner:

Wayne Brown Enterprises, Inc.

Address:

Rt. #1, Box 145, Gilliam, MO 65330

Continuing Authority:

Same as above

Address:

Same as above

Facility Name:

Fish Creek Landfarm #1

Facility Address:

Rt. #1, Box 145, Gilliam, MO 65330

Legal Description:

SW ¼, SW ¼, Sec. 3, T51N, R19W, Saline County

Latitude/Longitude:

+3913208/-09258407

Receiving Stream:

Unnamed Tributary to Fish Creek (U)

First Classified Stream and ID:

Fish Creek (C) (0783)

USGS Basin & Sub-watershed No.:

(10300102-010001)

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

Outfall #001 - Landfarm- SIC #5541

Surface treatment cell for remediation of soil and water contaminated with petroleum hydrocarbons. Up to 3,000 gallons of water may be introduced into the cell per month.

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

A handwritten signature in black ink, reading "Doyle Childers".

Effective Date

Doyle Childers, Director, Department of Natural Resources
Executive Secretary, Clean Water Commission

Expiration Date
MO 780-0041 (10-93)

Edward Galbraith, Director of Staff, Clean Water Commission

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 2 of 4	
					PERMIT NUMBER MO-0132888	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001</u>						
Flow	MGD	*		*	once/month	24 hr. total
Settleable Solids	ml/L/hour				once/month	grab
Total Suspended Solids	mg/L		50	30	once/month	grab
pH – Units	SU	**		**	once/month	grab
Total BTEX	mg/L	0.75		0.75	once/month	grab
Total Petroleum Hydrocarbons	mg/L	10		10	once/month	grab
Oil & Grease	mg/L	15		15	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED MONTHLY; THE FIRST REPORT IS DUE _____. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I & III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

MO 780-0010 (8/91)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
- ** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.

C. SPECIAL CONDITIONS

1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
 - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) controls any pollutant not limited in the permit.
 - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
 - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.
2. All outfalls must be clearly marked in the field.

C. SPECIAL CONDITIONS (continued)

3. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established in Part A of the permit by the Director.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.

4. Report as no-discharge when a discharge does not occur during the report period.

5. Water Quality Standards

- (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
- (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (5) There shall be no significant human health hazard from incidental contact with the water;
 - (6) There shall be no acute toxicity to livestock or wildlife watering;
 - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

- 6. Only soils contaminated with gasoline, diesel fuel, fuel oil, kerosene, or aviation fuel, and having a TPH concentration of 10,000 ppm dry weight or less, may be placed in a treatment cell under this permit. Soils contaminated with used oil, as defined in 10 CSR 25-11.279 incorporating 40 CFR 279.1, shall not be landfarmed under this permit.
- 7. This permit does not authorize the discharge of waters other than storm waters.
- 8. Soil will be managed in accordance with the Missouri Risk-Based Corrective Action for Underground Storage Tanks Technical Guidance document. Soil must be sampled and may be removed if it complies with the Tier 1 Risk Based Target Levels (RBTLs) for surficial soils, including the RBTLs pertaining to contaminants leaching from soil to groundwater (found in Tables 7-4(a) through 7-12(c) of the February 2005 MRBCA RBTL tables). However, if, once remediated, the soil is to be placed at a depth of greater than three feet (3') below ground surface, the RBTLs for subsurface soil must also be met. The permittee must determine the soil type [sandy, silty or clayey] and the use [residential or non-residential] of the property on which the soil will be deposited. The soil must meet the RBTLs for the applicable soil type, proposed use and location, and applicable exposure pathways before the soil is removed from the landfarm. As an alternative to determining soil type and land use, the permittee may instead remediate soils to comply with the Default Target Levels (DTLs). If soil will be remediated to DTLs, confirmation sampling is still required prior to removing the soil from the landfarm. In either case, the permittee shall submit sample analysis along with the proposed end use to the Water Protection Program for approval prior to removal.
- 9. Remediated soil may not be placed in contact with groundwater or surface water.

C. SPECIAL CONDITIONS (continued)

10. Soils removed and transported to a permitted solid waste disposal facility are not subject to SPECIAL CONDITION 8. above.
11. Soil samples shall be one composite sample per 100 cubic yards of soil and composed of soil from no more than 4 separate locations, and collected from a depth no less than 12 inches.
12. Surface Treatment Cell Requirements and Specifications
 - (a) Minimum vertical depth from the bottom of a treatment cell to the seasonal high water table shall be at least five feet.
 - (b) The treatment cell floor shall be surrounded by a two foot berm to contain contaminated soils and exclude water runoff.
 - (d) Contaminated soil shall be spread within the treatment cell to a depth >18 but <24 inches to allow tilling without compromising the integrity of the plastic liner.
 - (e) Treatment cells shall not contain >2500 cubic yards of contaminated soil. Contaminated soil from more than one facility may be placed in the treatment cell if soils are kept separate. The permittee shall submit written notification to the Water Protection Program to document that additional soil is being placed in a treatment cell. This notification shall detail the source, amount, and contamination level of the soil to be added.
 - (f) The treatment cell shall be constructed such that storm water runoff from the cell is collected in a retention basin that has one outfall. The retention basin shall have a liner that meets standard engineering specifications (as per 10 CSR 20-8) and shall be sized to retain the volume of water resulting from a 10-year 24 hour storm event. The basin provides for settling of suspended material, and adequate retention time to allow for testing water and treatment as needed to meet permit effluent limitations before discharging.
 - (g) Stockpiled soils shall be placed on and covered with 12 ml or greater plastic unless soil is under roof and not exposed to storm water.

Date of Fact Sheet: August 28, 2006

Date of Public Notice: September 22, 2006

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT
FACT SHEET

This Fact Sheet explains the applicable regulations, rationale for development of this permit and the public participation process.

NPDES PERMIT NUMBER: MO-0132896

FACILITY NAME: Fish Creek Landfarm #1

OWNER NAME: Wayne Brown Enterprises, Inc.

LOCATION: SW ¼, SW ¼, Sec. 3, T51N, R19W, Saline County

RECEIVING STREAM: Unnamed Tributary to Fish Creek

FACILITY DESCRIPTION AND RATIONALE

Surface treatment cell for landfarming soil contaminated with petroleum hydrocarbons.

The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollutant Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States, and the release of storm water from certain point sources. All such discharges are unlawful without a permit (Section 301 of the "Clean Water Act"). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Permits in Missouri are issued by the Director of the Department of Natural Resources under an approved program, operating in accordance with federal and state laws (Federal "Clean Water Act" and "Missouri Clean Water Law" Section 644 as amended).

10 CSR 20-7.031 Missouri Water Quality Standards, Missouri Department of Natural Resources (the Department) "defines the Clean Water Commission water quality objectives in terms of water uses to be maintained and the criteria to protect those uses." The receiving stream's beneficial water uses to be maintained are livestock and wildlife watering, whole body contact recreation and protection of aquatic life.

To protect these beneficial uses and the water quality of the receiving stream, effluent limitations have been established under federal and state laws. Please see the Water Quality Review Sheet portion of this Fact Sheet for explanation of effluent limit derivation.

This permit will be issued for a period of five years.



Missouri Department of Natural Resources
Water Protection Program
Water Pollution Control Branch
NPDES Permits & Engineering Section

Water Quality Review Sheet

Determination of Effluent Limits

Facility Information

FACILITY NAME: Fish Creek Landfarm #1 NPDES #: MO-0132896

FACILITY TYPE/DESCRIPTION: Commercial Landfarm, R401 discontinued. Needs a site specific permit.

EDU: Ozark / Moreau / Loutre Drainages 8-DIGIT HUC: 10300102 COUNTY: Saline
EDU = Ecological Drainage Unit

LEGAL DESCRIPTION: SW 1/4, SW 1/4, Sec. 3, T51N, R19W LATITUDE/LONGITUDE: +3913208/-09258407

WATER QUALITY HISTORY: According to DMRs, this facility has never discharged.

Outfall Characteristics

OUTFALL	DESIGN FLOW (CFS)	TREATMENT TYPE	RECEIVING WATERBODY	OTHER
001	varies	settling	Unnamed Tributary Fish Creek	

Receiving Waterbody Information

WATERBODY	CLASS	WBID	1Q10 (CFS)	7Q10 (CFS)	30Q10 (CFS)	*DESIGNATED USES
Unnamed Tributary to Creek	U		0.0	0.0	0.0	General Criteria
Fish Creek	C	0783	0.0	0.0	0.1	LWW, AQL, WBC

*Cool Water Fishery (CLF), Cold Water Fishery (CDF), Irrigation (IRR), Industrial (IND), Drinking Water Supply (DWS), Secondary Contact Recreation (SCR), Whole Body Contact Recreation (WBC), Protection of Warmwater Aquatic Life and Human Health (AQL), Livestock & Wildlife Watering (LWW)

COMMENTS: Approximately 1.4 miles to Fish Creek

Mixing Considerations

Mixing Zone (MZ). Not allowed. 10 CSR 20-7.031(4)(A)4.B.(I)(a)

Zone of Initial Dilution (ZID). Not allowed. 10 CSR 20-7.031(4)(A)4.B.(I)(b)

	Flow (cfs)	MZ (cfs)	ZID (cfs)
1Q10	0.0	0.0	0.0
7Q10	0.0	0.0	0.0
30Q10	0.0	0.0	N/A

Permit Limits And Information

TMDL WATERSHED:
(Y OR N)

☐ N

W.L.A. STUDY CONDUCTED:
(Y OR N)

☐ N

DISINFECTION REQUIRED:
(Y OR N)

☐ N*

USE ATTAINABILITY
ANALYSIS (Y,N)

☐ N

*No source of bacteria

OUTFALL# 001

WET TEST (Y OR N):

☐ N

FREQUENCY:

A.E.C.

LIMIT:

PARAMETER	UNITS	MAXIMUM DAILY LIMIT	WEEKLY AVERAGE LIMIT	AVERAGE MONTHLY LIMIT	MONITORING FREQUENCY
FLOW	MGD	MONITOR		MONITOR	DAILY
SETTLEABLE SOLIDS	ml/L/hr	1.5		1.0	ONCE/MONTH
TOTAL SUSPENDED SOLIDS	mg/L	50		30	ONCE/MONTH
pH	SU	6-9		6-9	ONCE/MONTH
TOTAL BETX	mg/L	0.75		0.75	ONCE/MONTH
TOTAL PETROLEUM HYDROCARBONS	mg/L	10		10	ONCE/MONTH
OIL & GREASE	mg/L	15		10	ONCE/MONTH

Derivation and Discussion of Limits

Wasteload allocations (WLA) were calculated using water quality criteria and the dilution equation below:

$$C = \frac{(C_s * Q_s) + (C_e * Q_e)}{(Q_e + Q_s)} \quad (\text{EPA/505/2-90-001, Section 4.5.5})$$

Where C = downstream concentration

C_s = upstream concentration

Q_s = upstream flow (cfs)

C_e = effluent concentration

Q_e = effluent flow (cfs)

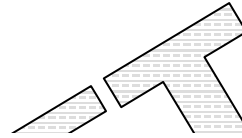
Chronic wasteload allocations were determined using applicable chronic water quality criteria (CCC: criteria continuous concentration) and stream volume of flow at the edge of the mixing zone (MZ). Acute wasteload allocations were determined using applicable acute water quality criteria (CMC: criteria maximum concentration) and stream volume of flow.

Water quality based maximum daily and average monthly effluent limitations were calculated using methods and procedures outlined in USEPA's "Technical Support Document For Water Quality-based Toxics Control" (EPA/505/2-90-001).

- **Total Suspended Solids** carried over from previous permit
- **Settleable Solids** 1.5 ml/L/hr daily maximum and 1.0 ml/L/hr. monthly average. Best Professional Judgement used to set these limits. These limits have been found to be protective of water quality at similar industrial stormwater facilities across the state.
- **pH** carried over from previous permit.
- **Total BETX** Total of Benzene, Ethylbenzene, Toluene and Xylene. Limits carried over from previous permit.
- **Total Petroleum Hydrocarbons** carried over from previous permit.

- **Oil & Grease.** Conventional pollutant, effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum.

Reviewer: Curt Gateley
Date: 06-19-06
Unit Chief: Refaat Mefrakis



Monitoring and effluent limits contained within this document have been developed in accordance with EPA guidelines using the best available data and are believed to be consistent with Missouri's Water Quality Standards and Effluent Regulations. If additional water quality data or are available that may affect the recommended monitoring and effluent limits, please forward these data and information to the author.

